

<b>Math (Science)</b>	<b>Group-II</b>	Paper
<b>Time: 20 Minutes</b>	<b>(Objective Type)</b>	<b>Max Marks: 15</b>

**Note:** Four possible answers A, B, C and D to each question are given. The choice which you think correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark for that question.

- 1-1- Order of transpose of**  $\begin{bmatrix} 2 & 1 \\ 0 & 1 \\ 3 & 2 \end{bmatrix}$  **is:**
- (a) 3 – by – 2 ✓      (b) 1 – by – 2  
 (c) 2 – by – 1      (d) 2 – by – 3
- 2- Every real number is:**
- (a) A positive integer  
 (b) A rational number  
 (c) A negative integer  
 (d) A complex number ✓
- 3-  $\log e = \dots$ , where ( $e \approx 2.718$ ) :**
- (a) 0      (b) 0.4343 ✓  
 (c)  $\infty$       (d) 1
- 4- Conjugate of surd  $a + \sqrt{b}$  is ----- :**
- (a)  $-a + \sqrt{b}$       (b)  $a - \sqrt{b}$  ✓  
 (c)  $\sqrt{a} + \sqrt{b}$       (d)  $\sqrt{a} - \sqrt{b}$
- 5- Find 'm' so that  $x^2 + 4x + m$  is a complete square:**
- (a) 8      (b) -8  
 (c) 4 ✓      (d) 16
- 6- The square root of  $a^2 - 2a + 1$  is ---- :**
- (a)  $\pm(a + 1)$       (b)  $\pm(a - 1)$  ✓  
 (c)  $a - 1$       (d)  $a + 1$

- 7- If  $x$  is no larger than 10, then ---- ;  
(a)  $x \geq 8$       (b)  $x \leq 10$  ✓  
(c)  $x < 10$       (d)  $x > 10$
- 8- Point  $(2, -3)$  lies in quadrant:  
(a) I      (b) II  
(c) III      (d) IV ✓
- 9- Mid-point of the points  $(0, 0)$  and  $(2, 2)$  is:  
(a)  $(1, 1)$  ✓      (b)  $(1, 0)$   
(c)  $(0, 1)$       (d)  $(-1, -1)$
- 10- Notation used for congruent is:  
(a)  $\perp$       (b)  $=$   
(c)  $\cong$  ✓      (d)  $\sim$
- 11- Notation  $\parallel$  means:  
(a) Congruent      (b) Equal  
(c) Parallel ✓      (d) Un-equal
- 12- Bisection means to divide into equal parts:  
(a) 1      (b) 3  
(c) 4      (d) 2 ✓
- 13- The unit of ratio is:  
(a) kg      (b) m  
(c) cm      (d) None of these ✓
- 14- A ray has ---- end points:  
(a) 2      (b) 1 ✓  
(c) 3      (d) 4
- 15- The right bisectors of the three sides of a triangle are ----- :  
(a) Congruent      (b) Collinear  
(c) Concurrent ✓      (d) Parallel